

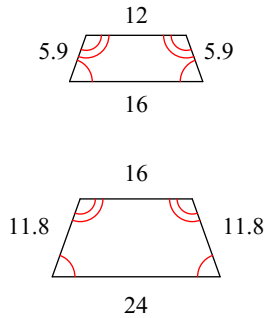
Geometry - PRACTICE EXAM 1 - Spring 2019

Solve each proportion.

1)  $\frac{v-3}{10} = \frac{v+11}{7}$

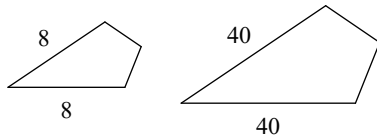
State if the polygons are similar.

2)



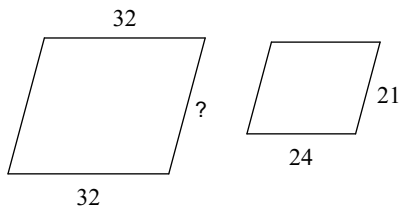
The polygons in each pair are similar. Find the scale factor of the smaller figure to the larger figure.

3)



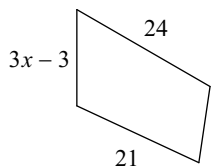
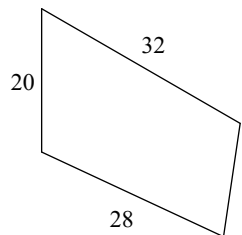
The polygons in each pair are similar. Find the missing side length.

4)



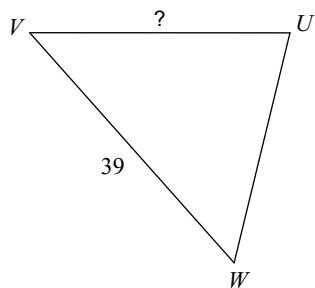
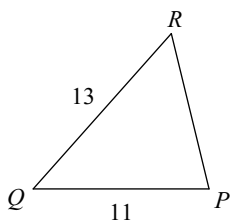
Solve for  $x$ . The polygons in each pair are similar.

5)



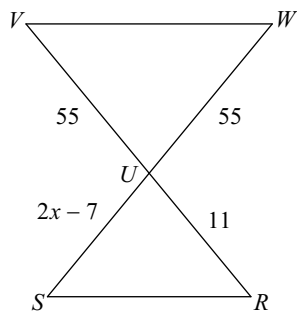
Find the missing length. The triangles in each pair are similar.

6)  $\triangle UVW \sim \triangle PQR$



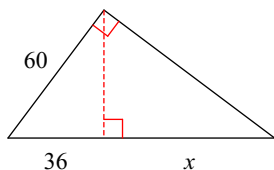
Solve for  $x$ . The triangles in each pair are similar.

7)  $\triangle UVW \sim \triangle URS$



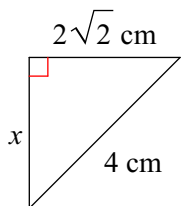
Find the missing length indicated. Leave your answer in simplest radical form.

8)



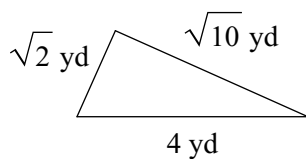
Find the missing side of each triangle. Leave your answers in simplest radical form.

9)



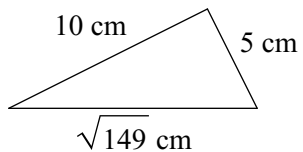
State if each triangle is a right triangle.

10)



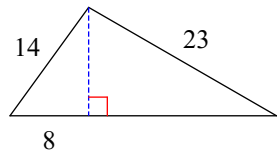
State if each triangle is acute, obtuse, or right.

11)



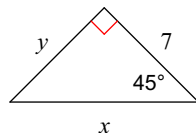
Find the area of each triangle. Round intermediate values to the nearest tenth. Use the rounded values to calculate the next value. Round your final answer to the nearest tenth.

12)

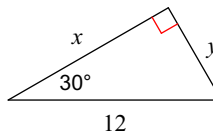


Find the missing side lengths. Leave your answers as radicals in simplest form.

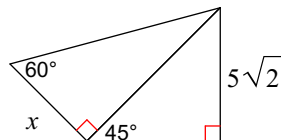
13)



14)

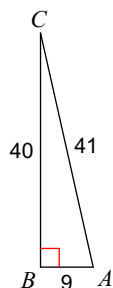


15)



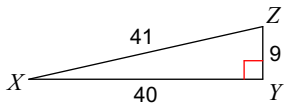
Find the value of each trigonometric ratio to the nearest ten-thousandth.

16)  $\sin C$



Find the value of each trigonometric ratio.

17)  $\sin X$

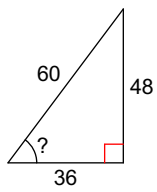


Find each angle measure to the nearest degree.

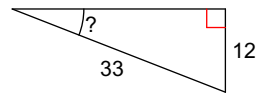
18)  $\tan B = 7.1154$

Find the measure of the indicated angle to the nearest degree.

19)



20)



## Answers to Geometry - PRACTICE EXAM 1 - Spring 2019

- |                            |                            |                            |                |
|----------------------------|----------------------------|----------------------------|----------------|
| 1) $\{-43.67\}$            | 2) not similar             | 3) 1 : 5                   | 4) 28          |
| 5) 6                       | 6) 33                      | 7) 9                       | 8) 64          |
| 9) $2\sqrt{2}$ cm          | 10) No                     | 11) Obtuse                 | 12) 160.4      |
| 13) $x = 7\sqrt{2}, y = 7$ | 14) $x = 6\sqrt{3}, y = 6$ | 15) $\frac{10\sqrt{3}}{3}$ | 16) 0.2195     |
| 17) $\frac{9}{41}$         | 18) $82^\circ$             | 19) $53^\circ$             | 20) $21^\circ$ |